May Exam 0590 0512 OIPE

CRF Errors Corrected by the STIC Systems Branch

Serial Number: 10/003,632C ENTERED

CRF Processing Date: 6/22/2003
Edited by: _____
Verified by: _____ (STIC staff)

☐ Changed a file from non-ASCII to ASCII

☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.

☐ Edited a format error in the Current Application Data section, specifically:

☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____.

☐ Added the mandatory heading and subheadings for "Current Application Data".

☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically:

☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:

☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐ Inserted colons after headings/subheadings. Headings edited included:

☑ Deleted extra, invalid, headings used by an applicant, specifically: <1407, <1417 alphabetical headings

☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____.

☐ Inserted mandatory headings, specifically: _____

☐ Corrected an obvious error in the response, specifically:

☐ Edited identifiers where upper case is used but lower case is required, or vice versa.

☐ Corrected an error in the Number of Sequences field, specifically:

☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____

☐ Other:

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

OIPE

RAW SEQUENCE LISTING DATE: 06/22/2003
PATENT APPLICATION: **US/10/003,632C** TIME: 17:43:45

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\06202003\J003632C.raw**

```
      3 <110> APPLICANT: Lee, Chichang; Ly, Celia; Moore, Gordon; Chi, Xiamei
      5 <120> TITLE OF INVENTION: Methods and Compositions for Enhanced Protein Expression
and/or Growth of
      6       Cultured Cells Using Co-Transcription of a Bcl2 Encoding Nucleic Acid
      8 <130> FILE REFERENCE: CEN0269
     10 <140> CURRENT APPLICATION NUMBER: US/10/003,632C
     11 <141> CURRENT FILING DATE: 2001-11-02
     13 <160> NUMBER OF SEQ ID NOS: 14
     15 <170> SOFTWARE: PatentIn Ver 3.1
     17 <210> SEQ ID NO: 1
     18 <211> LENGTH: 239
     19 <212> TYPE: PRT
     20 <213> ORGANISM: Homo sapiens
     22 <400> SEQUENCE: 1
     23 Met Ala His Ala Gly Arg Thr Gly Tyr Asp Asn Arg Glu Ile Val Met
     24 1               5                  10                  15
     26 Lys Tyr Ile His Tyr Lys Leu Ser Gln Arg Gly Tyr Glu Trp Asp Ala
     27             20                  25                  30
     29 Gly Asp Val Gly Ala Ala Pro Pro Gly Ala Ala Pro Ala Pro Gly Ile
     30         35                  40                  45
     32 Phe Ser Ser Gln Pro Gly His Thr Pro His Pro Ala Ala Ser Arg Asp
     33     50                  55                  60
     35 Pro Val Ala Arg Thr Ser Pro Leu Gln Thr Pro Ala Ala Pro Gly Ala
     36 65                  70                  75                  80
     38 Ala Ala Gly Pro Ala Leu Ser Pro Val Pro Pro Val Val His Leu Ala
     39                 85                  90                  95
     41 Leu Arg Gln Ala Gly Asp Asp Phe Ser Arg Arg Tyr Arg Gly Asp Phe
     42             100                 105                 110
     44 Ala Glu Met Ser Ser Gln Leu His Leu Thr Pro Phe Thr Ala Arg Gly
     45         115                 120                 125
     47 Arg Phe Ala Thr Val Val Glu Glu Leu Phe Arg Asp Gly Val Asn Trp
     48     130                 135                 140
     50 Gly Arg Ile Val Ala Phe Phe Glu Phe Gly Gly Val Met Cys Val Glu
     51 145                 150                 155                 160
     53 Ser Val Asn Arg Glu Met Ser Pro Leu Val Asp Asn Ile Ala Leu Trp
     54                 165                 170                 175
     56 Met Thr Glu Tyr Leu Asn Arg His Leu His Thr Trp Ile Gln Asp Asn
     57             180                 185                 190
     59 Gly Gly Trp Asp Ala Phe Val Glu Leu Tyr Gly Pro Ser Met Arg Pro
     60         195                 200                 205
     62 Leu Phe Asp Phe Ser Trp Leu Ser Leu Lys Thr Leu Leu Ser Leu Ala
     63     210                 215                 220
     65 Leu Val Gly Ala Cys Ile Thr Leu Gly Ala Tyr Leu Ser His Lys
     66 225                 230                 235
```

ENTERED

RAW SEQUENCE LISTING DATE: 06/22/2003
PATENT APPLICATION: **US/10/003,632C** TIME: 17:43:45

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\06202003\J003632C.raw**

<210> SEQ ID NO: 2
<211> LENGTH: 205
<212> TYPE: PRT
<213> ORGANISM: Homo sapiens
<400> SEQUENCE: 2

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1               5                  10                  15
Lys Tyr Ile His Tyr Lys Leu Ser Gln Arg Gly Tyr Glu Trp Asp Ala
            20                  25                  30
Gly Asp Val Gly Ala Ala Pro Pro Gly Ala Ala Pro Ala Pro Gly Ile
        35                  40                  45
Phe Ser Ser Gln Pro Gly His Thr Pro His Pro Ala Ala Ser Arg Asp
    50                  55                  60
Pro Val Ala Arg Thr Ser Pro Leu Gln Thr Pro Ala Ala Pro Gly Ala
65                  70                  75                  80
Ala Ala Gly Pro Ala Leu Ser Pro Val Pro Pro Val Val His Leu Ala
                85                  90                  95
Leu Arg Gln Ala Gly Asp Asp Phe Ser Arg Arg Tyr Arg Gly Asp Phe
            100                 105                 110
Ala Glu Met Ser Ser Gln Leu His Leu Thr Pro Phe Thr Ala Arg Gly
        115                 120                 125
Arg Phe Ala Thr Val Val Glu Glu Leu Phe Arg Asp Gly Val Asn Trp
    130                 135                 140
Gly Arg Ile Val Ala Phe Phe Glu Phe Gly Gly Val Met Cys Val Glu
145                 150                 155                 160
Ser Val Asn Arg Glu Met Ser Pro Leu Val Asp Asn Ile Ala Leu Trp
                165                 170                 175
Met Thr Glu Tyr Leu Asn Arg His Leu His Thr Trp Ile Gln Asp Asn
            180                 185                 190
Gly Gly Trp Val Gly Ala Ser Gly Asp Val Ser Leu Gly
        195                 200                 205
```

<210> SEQ ID NO: 3
<211> LENGTH: 239
<212> TYPE: PRT
<213> ORGANISM: Homo sapiens
<400> SEQUENCE: 3

```
Met Ala His Ala Gly Arg Thr Gly Tyr Asp Asn Arg Glu Ile Val Met
1               5                  10                  15
Lys Tyr Ile His Tyr Lys Leu Ser Gln Arg Gly Tyr Glu Trp Asp Ala
            20                  25                  30
Gly Asp Val Gly Ala Ala Pro Pro Gly Ala Ala Pro Ala Pro Gly Ile
        35                  40                  45
Phe Ser Ser Gln Pro Gly His Thr Pro His Pro Ala Ala Ser Arg Asp
    50                  55                  60
Pro Val Ala Arg Thr Ser Pro Leu Gln Thr Pro Ala Ala Pro Gly Ala
65                  70                  75                  80
Ala Ala Gly Pro Ala Leu Ser Pro Val Pro Pro Val Val His Leu Ala
                85                  90                  95
Leu Arg Gln Ala Gly Asp Asp Phe Ser Arg Arg Tyr Arg Gly Asp Phe
```

RAW SEQUENCE LISTING DATE: 06/22/2003
PATENT APPLICATION: US/10/003,632C TIME: 17:43:45

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\06202003\J003632C.raw

```
139             100                 105                 110
141 Ala Glu Met Ser Ser Gln Leu His Leu Thr Pro Phe Thr Ala Arg Gly
142         115                 120                 125
144 Arg Phe Ala Thr Val Val Glu Glu Leu Phe Arg Asp Gly Val Asn Trp
145     130                 135                 140
147 Gly Arg Ile Val Ala Phe Phe Glu Phe Gly Gly Val Met Cys Val Glu
148 145                 150                 155                 160
150 Ser Val Asn Arg Glu Met Ser Pro Leu Val Asp Asn Ile Ala Leu Trp
151                 165                 170                 175
153 Met Thr Glu Tyr Leu Asn Arg His Leu His Thr Trp Ile Gln Asp Asn
154             180                 185                 190
156 Gly Gly Trp Asp Ala Phe Val Glu Leu Tyr Gly Pro Ser Met Arg Pro
157         195                 200                 205
159 Leu Phe Asp Phe Ser Trp Leu Ser Leu Lys Thr Leu Leu Ser Leu Ala
160     210                 215                 220
162 Leu Val Gly Ala Cys Ile Thr Leu Gly Ala Tyr Leu Ser His Lys
163 225                 230                 235
166 <210> SEQ ID NO: 4
167 <211> LENGTH: 21
168 <212> TYPE: PRT
169 <213> ORGANISM: Homo sapiens
171 <400> SEQUENCE: 4
172 Asp Met Phe Ser Asp Gly Asn Phe Asn Trp Val Arg Val Val Ala Leu
173 1               5                   10                  15
175 Phe Tyr Phe Ala Ser
176             20
178 <210> SEQ ID NO: 5
179 <211> LENGTH: 175
180 <212> TYPE: PRT
181 <213> ORGANISM: Homo sapiens
183 <400> SEQUENCE: 5
184 Met Asp Glu Asp Val Leu Pro Gly Glu Val Leu Ala Ile Glu Gly Ile
185 1               5                   10                  15
187 Phe Met Ala Cys Gly Leu Asn Glu Pro Glu Tyr Leu Tyr His Pro Leu
188             20                  25                  30
190 Leu Ser Pro Ile Lys Leu Tyr Ile Thr Gly Leu Met Arg Asp Lys Glu
191         35                  40                  45
193 Ser Leu Phe Glu Ala Met Leu Ala Asn Val Arg Phe His Ser Thr Thr
194     50                  55                  60
196 Gly Ile Asn Gln Leu Gly Leu Ser Met Leu Gln Val Ser Gly Asp Gly
197 65                  70                  75                  80
199 Asn Met Asn Trp Gly Arg Ala Leu Ala Ile Leu Thr Phe Gly Ser Phe
200                 85                  90                  95
202 Val Ala Gln Lys Leu Ser Asn Glu Pro His Leu Arg Asp Phe Ala Leu
203             100                 105                 110
205 Ala Val Leu Pro Val Tyr Ala Tyr Glu Ala Ile Gly Pro Gln Trp Phe
206         115                 120                 125
208 Arg Ala Arg Gly Gly Trp Arg Gly Leu Lys Ala Tyr Cys Thr Gln Val
209     130                 135                 140
```

RAW SEQUENCE LISTING DATE: 06/22/2003
PATENT APPLICATION: US/10/003,632C TIME: 17:43:45

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\06202003\J003632C.raw

```
211 Leu Thr Arg Arg Arg Gly Arg Arg Met Thr Ala Leu Leu Gly Ser Ile
212 145                 150                 155                 160
214 Ala Leu Leu Ala Thr Ile Leu Ala Ala Val Ala Met Ser Arg Arg
215                 165                 170                 175
217 <210> SEQ ID NO: 6
218 <211> LENGTH: 211
219 <212> TYPE: PRT
220 <213> ORGANISM: Homo sapiens
222 <400> SEQUENCE: 6
223 Met Ala Ser Gly Gln Gly Pro Gly Pro Pro Arg Gln Glu Cys Gly Glu
224 1               5                   10                  15
226 Pro Ala Leu Pro Ser Ala Ser Glu Glu Gln Val Ala Gln Asp Thr Glu
227             20                  25                  30
229 Glu Val Phe Arg Ser Tyr Val Phe Tyr Arg His Gln Gln Glu Gln Glu
230         35                  40                  45
232 Ala Glu Gly Val Ala Ala Pro Ala Asp Pro Glu Met Val Thr Leu Pro
233     50                  55                  60
235 Leu Gln Pro Ser Ser Thr Met Gly Gln Val Gly Arg Gln Leu Ala Ile
236 65                  70                  75                  80
238 Ile Gly Asp Asp Ile Asn Arg Arg Tyr Asp Ser Glu Phe Gln Thr Met
239                 85                  90                  95
241 Leu Gln His Leu Gln Pro Thr Ala Glu Asn Ala Tyr Glu Tyr Phe Thr
242             100                 105                 110
244 Lys Ile Ala Thr Ser Leu Phe Glu Ser Gly Ile Asn Trp Gly Arg Val
245         115                 120                 125
247 Val Ala Leu Leu Gly Phe Gly Tyr Arg Leu Ala Leu His Val Tyr Gln
248     130                 135                 140
250 His Gly Leu Thr Gly Phe Leu Gly Gln Val Thr Arg Phe Val Val Asp
251 145                 150                 155                 160
253 Phe Met Leu His His Cys Ile Ala Arg Trp Ile Ala Gln Arg Gly Gly
254                 165                 170                 175
256 Trp Val Ala Ala Leu Asn Leu Gly Asn Gly Pro Ile Leu Asn Val Leu
257             180                 185                 190
259 Val Val Leu Gly Val Val Leu Leu Gly Gln Phe Val Val Arg Arg Phe
260         195                 200                 205
262 Phe Lys Ser
263     210
266 <210> SEQ ID NO: 7
267 <211> LENGTH: 170
268 <212> TYPE: PRT
269 <213> ORGANISM: Homo sapiens
271 <400> SEQUENCE: 7
272 Met Ser Gln Ser Asn Arg Glu Leu Val Val Asp Phe Leu Ser Tyr Lys
273 1               5                   10                  15
275 Leu Ser Gln Lys Gly Tyr Ser Trp Ser Gln Phe Ser Asp Val Glu Glu
276             20                  25                  30
278 Asn Arg Thr Glu Ala Pro Glu Gly Thr Glu Ser Glu Met Glu Thr Pro
279         35                  40                  45
281 Ser Ala Ile Asn Gly Asn Pro Ser Trp His Leu Ala Asp Ser Pro Ala
```

RAW SEQUENCE LISTING DATE: 06/22/2003
PATENT APPLICATION: US/10/003,632C TIME: 17:43:45

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\06202003\J003632C.raw

```
282     50                  55                  60
284 Val Asn Gly Ala Thr Gly His Ser Ser Ser Leu Asp Ala Arg Glu Val
285 65                  70                  75                  80
287 Ile Pro Met Ala Ala Val Lys Gln Ala Leu Arg Glu Ala Gly Asp Glu
288                 85                  90                  95
290 Phe Glu Leu Arg Tyr Arg Arg Ala Phe Ser Asp Leu Thr Ser Gln Leu
291             100                 105                 110
293 His Ile Thr Pro Gly Thr Ala Tyr Gln Ser Phe Glu Gln Asp Thr Phe
294         115                 120                 125
296 Val Glu Leu Tyr Gly Asn Asn Ala Ala Ala Glu Ser Arg Lys Gly Gln
297     130                 135                 140
299 Glu Arg Phe Asn Arg Trp Phe Leu Thr Gly Met Thr Val Ala Gly Val
300 145                 150                 155                 160
302 Val Leu Leu Gly Ser Leu Phe Ser Arg Lys
303                 165                 170
305 <210> SEQ ID NO: 8
306 <211> LENGTH: 160
307 <212> TYPE: PRT
308 <213> ORGANISM: Homo sapiens
310 <400> SEQUENCE: 8
311 Met Ser Glu Val Arg Pro Leu Ser Arg Asp Ile Leu Met Glu Thr Leu
312 1               5                   10                  15
314 Leu Tyr Glu Gln Leu Leu Glu Pro Pro Thr Met Glu Val Leu Gly Met
315             20                  25                  30
317 Thr Asp Ser Glu Glu Asp Leu Asp Pro Met Glu Asp Phe Asp Ser Leu
318         35                  40                  45
320 Glu Cys Met Glu Gly Ser Asp Ala Leu Ala Leu Arg Leu Ala Cys Ile
321     50                  55                  60
323 Gly Asp Glu Met Asp Val Ser Leu Arg Ala Pro Arg Leu Ala Gln Leu
324 65                  70                  75                  80
326 Ser Glu Val Ala Met His Ser Leu Gly Leu Ala Phe Ile Tyr Asp Gln
327                 85                  90                  95
329 Thr Glu Asp Ile Arg Asp Val Leu Arg Ser Phe Met Asp Gly Phe Thr
330             100                 105                 110
332 Thr Leu Lys Glu Asn Ile Met Arg Phe Trp Arg Ser Pro Asn Pro Gly
333         115                 120                 125
335 Ser Trp Val Ser Cys Glu Gln Val Leu Leu Ala Leu Leu Leu Leu Leu
336     130                 135                 140
338 Ala Leu Leu Leu Pro Leu Leu Ser Gly Gly Leu His Leu Leu Leu Lys
339 145                 150                 155                 160
341 <210> SEQ ID NO: 9
342 <211> LENGTH: 218
343 <212> TYPE: PRT
344 <213> ORGANISM: Homo sapiens
346 <400> SEQUENCE: 9
347 Met Asp Gly Ser Gly Glu Gln Pro Arg Gly Gly Gly Pro Thr Ser Ser
348 1               5                   10                  15
350 Glu Gln Ile Met Lys Thr Gly Ala Leu Leu Leu Gln Gly Phe Ile Gln
351             20                  25                  30
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 06/22/2003
PATENT APPLICATION: **US/10/003,632C** TIME: 17:43:46

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\06202003\J003632C.raw**

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 5

VERIFICATION SUMMARY DATE: 06/22/2003
PATENT APPLICATION: **US/10/003,632C** TIME: 17:43:46

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\06202003\J003632C.raw**

L:614 M:283 W: Missing Blank Line separator, <400> field identifier

10/003,632C

Sequence Listing

<110> Lee, Chichang; Ly, Celia; Moore, Gordon; Chi, Xiamei

<120> Methods and Compositions for Enhanced Protein Expression and/or Growth of Cultured Cells Using Co-Transcription of a Bcl2 Encoding Nucleic Acid

<130> CEN0269

<140> CURRENT APPLICATION NUMBER: US/10/003,632B
<141> CURRENT APPLICATION DATE: 2001-11-02

Does Not Comply
Corrected Diskette Needed